DOCUMENT RESUME

ED 347 627 EA 024 025

TITLE	Tennessee Public Education: Positioned for Progress in the 1990s. Annual Joint Report on Preschool through Graduate Education in Tennessee.
INSTITUTION	Tennessee Higher Education Commission, Nashville.; Tennessee State Board of Education, Nashville.
PUB DATE	31 Jan 92
NOTE	42p.
PUB TYPE	Reports - Evaluative/Feasibility (142) -- Reports - Descriptive (141)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Dropout Rate; *Economic Factors; *Educational Change; *Educational Objectives; *Educational Planning; Educational Technology; Elementary Secondary Education; Graduation Requirements; Higher Education; Preschool Education; Program Evaluation; School Restructuring; *State Action
IDENTIFIERS	*Tennessee

ABSTRACT

Plans for restructuring Tennessee public education have been interrupted by the prolonged national recession and a $276.4 million reduction in the 1991-92 state education budget. The state's 1991 Annual Joint Report identified 26 essential educational objectives. Although progress in some areas has been limited, Tennessee has achieved a 25 percent yearly increase in GED recipients; a 15 percent yearly increase in college-bound high school graduates; a 10 percent increase in state public college graduate rates; an improvement in black participation rate in Tennessee higher education; a declining high school dropout rate; a decrease in elementary grade-level retention rates; an improvement in state and ACT achievement test scores; an increase in state-licensed teachers; an increase in school-business partnerships and school-based management; and an increase in university research and private gifts and grants. During 1992, state and local policy makers should provide adequate funding for all education levels; create a statewide technology network; encourage increased usage of educational technology; enroll all 4-year-old at-risk children and their families in early childhood and parent involvement programs; and increase applied university research. Appendices contain joint report requirements, high school graduation and state college entry requirements, national and state education goals, the State Board of Education master education plan, the Tennessee Challenge 200 program, and related documents. (MLH)

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TENNESSEE PUBLIC EDUCATION: POSITIONED FOR PROGRESS IN THE 1990s

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TENNESSEE PUBLIC EDUCATION: POSITIONED FOR PROGRESS IN THE 1990s

Annual Joint Report
on
Preschool Through Graduate Education in Tennessee

The Tennessee State Board of Education
and
The Tennessee Higher Education Commission

January 31, 1992

FROM THE EXECUTIVE DIRECTORS

Tennessee's schools, colleges, and universities embody the state's hopes for the future. The strength of Tennessee's economic development and quality of life are dependent on our developing and maintaining a first class education system. As leaders, we must do no less than our best to serve the needs of students in order to meet the needs of the state.

National, regional, state, and local plans and goals have been developed over the past three years which are challenging and exciting. Much progress has been made but much is still to be done.

The master plan for Tennessee public schools has seven major focuses:

1. To provide a sound instructional program; full tool box of resources
2. To provide an education for all children; additional resources for those at-risk
3. To provide state-of-the-art technology for learning, professional development, management, and communication
4. To focus accountability on results rather than process
5. To focus school leadership on improvement of school and school system performance
6. To expand school-based decision making
7. To provide a comprehensive approach to funding schools which is adequate and equitable, supports new initiatives, and is tied to goals and accountability standards

The master plan for Tennessee public higher education has six goals:

1. To serve more students,
2. To serve K-12 educational reforms,
3. To serve the Tennessee economy,
4. To operate at a high level of quality,
5. To operate efficiently, and
6. To use technology.

To achieve results, especially in a time of financial stringency, bold and innovative strategies have been and will continue to be used by the state's education leaders. When the goals are realized, students in Tennessee will be able to move through the public education system--preschool through graduate school--as if it were a continuum rather than a system of distinct levels or separate stages. Graduation from high school and entry to postsecondary education--vocational school, technical institute, community college, or senior college or university--will be a reality for more and more Tennesseans as we enter the 21st Century.

Governor McWherter has consistently said that educational improvements are for all students enrolled in kindergarten through higher education. Outstanding plans and objectives have been developed to ensure long-term and substantial improvements at every level. A renewed commitment to excellence and additional resources are absolutely essential to achieve the goals contained in this annual joint report and to continue the momentum gained across the state during the 1980s.

C. Brent Poulton
Executive Director
State Board of Education

Arliss L. Roaden
Executive Director
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PREFACE

The State Board of Education and the Tennessee Higher Education Commission annually report the status of public education to the Governor, the General Assembly, and all public schools and institutions of higher education and their respective boards. (TCA 49-1-302, APPENDIX A) The preparation of the annual joint report provides an opportunity for the State Board and the Higher Education Commission to assess joint efforts, provide an overview of the challenges and prospects for public education, and present a statement on the improvements, plans, and goals for the future.

The 1992 annual joint report *Tennessee Public Education: Positioned for Progress in the 1990s* summarizes the status of Tennessee public education, preschool through graduate school, across the state following a most difficult and challenging year. The report describes a public education system positioned for reform as well as the progress being made on goals for the 21st century public education system.

During the next several years, Tennessee must make available an educational system which will support a changing economy, improve the quality of life, and meet the aspirations of its citizens. The Board and the Commission affirm their resolve to provide the necessary policy leadership to attain the goals of the respective Master Plans for public schools and higher education institutions and to meet these challenges. They also stand ready to support the Governor and the General Assembly in adopting the necessary statutory reforms to provide adequate resources, programs, and accountability measures to provide an opportunity for a quality education to every Tennessean.

The Annual Joint Report for 1992, *Tennessee Public Education: Positioned for Progress in the 1990s*, was approved by the State Board of Education and the Tennessee Higher Education Commission on January 31, 1992.

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INTRODUCTION

The year 1991 provided a number of watershed events. It was a year which historians will likely refer to as a dividing point in describing and analyzing the major political, cultural, educational, and economic movements in the last half of the 20th century.

Global events in 1991 included a major military conflict in the Persian Gulf involving most of the major military forces in the world, the reunification of East and West Germany following forty-five years of division during the Cold War, the integration of the European community, the dissolution of the Soviet Union and the Soviet Communist Party, and the continued economic recession in the United States of America. These events underscore the interconnection and interdependence of the world's nations and peoples and the emergence of a global society.

In the ten years preceding 1991, Tennessee fully recognized the importance of an effective education system for economic development and for the quality of life of its citizens in an increasingly competitive, international marketplace. Since 1985, the Board and the Commission have annually issued a joint report. Each report has summarized the progress and improvements in the public education system which support the desire of Tennesseans for continuing development and growth in the state's economic system. Each report has highlighted both the improving academic performance of students and the areas which need additional attention. Each report has also emphasized the close link between effectiveness of the education system and the maintenance of economic viability in the state.

Last year's report, *Challenges for Tennessee Public Education: Working Together Toward the Twenty-first Century*, documented the challenges facing public education during the 1990s. The report also outlined the goals and strategies adopted by the Board and Commission in their respective Master Plans to address these challenges. The introduction to the 1991 joint report ended with the question of whether Tennessee would commit the resources to implement the agreed upon plans and, thus, achieve the goals. That question remains as we move into 1992 and submit this year's annual report.

Plans for restructuring Tennessee public education have been interrupted by the prolonged national economic recession. The adoption of education reforms by the General Assembly has been complicated by the reduced tax revenues available. During 1991, the Tennessee General Assembly addressed, but did not take final action on, the education reform package and tax reform package presented by the administration. The state budget for support to public education was reduced during 1991-92 by $276.4 million ($113 million for grades K-12 and $163.4 million for higher education).

These developments threaten to undercut the state's hopes for quality education in the future. Less than three years ago, the higher education budget had reached full funding of the academic formula and the state's higher education institutions were making significant strides in being recognized nationally for excellence in education. Public schools anticipated full funding of a new funding formula and improvements for programs in grades K-12 occurring relatively soon. Instead of obtaining adequate funding, both levels of the public education system have experienced a reduction in resources at a time when demands on the system are increasing.

While implementation of the entire education reform package has been delayed, the Board and the Commission have continued to place the highest priority on serving the students while maintaining the vision of reforms needed in Tennessee public education. In July 1991, the Board adopted a major revision in state rules, regulations, and minimum standards governing local school systems. The reduced state

mandates provide greater flexibility and place the responsibility for accomplishing desired results in the hands of educators and local school officials. In November 1990, the Board adopted a policy for alternative licensure of teachers. The policy is designed to attract highly capable individuals into the teaching profession through a more streamlined process. In addition, the Board adopted in May 1991 an increase in high school graduation requirements. High school students graduating in 1994-95 will have completed either additional social studies, mathematics, and science coursework prior to graduation.

Performance at Tennessee's public colleges and universities has continued to improve over the past five years--student learning is competitive with national averages; occupational student job placement is near 95%; the pass rate on national board and licensure examinations is competitive with or above national averages; and the support from alumni and private citizens has never been higher. The reform policy in higher education to enroll greater numbers of Tennesseans to lift the level of education and job skills is being implemented in a dramatic manner (30,000 additional students in three years). Evidence of high quality persists, though in the long-term, increasing enrollments with decreasing revenues cannot continue without seriously compromising quality. Other reform policies, such as regional centers of industrial technology and statewide use of telecommunications technology have, necessarily, been postponed.

Although progress is being made, the year has been a difficult one because of the continued recession. School systems, colleges, and universities have been forced to use reserves, cut positions, and make reallocations from unfilled positions. Beyond the need to serve additional students, there are major concerns about losing momentum on the quality of performance which has been the source of state and local pride for the past six or seven years.

No one can accurately predict the future; however, the Board and the Commission are confident that the improvement efforts of the past ten years have positioned Tennessee to achieve the education goals established for the 21st century. These goals are part of the master plans already adopted by the Board and the Commission. This joint report documents areas where dramatic progress has already occurred. Plans are now in place to accomplish the further desired results in public education which will lead Tennessee into the next century. Again, the only remaining question is whether we have the will to commit the resources to implement the plans, continue the improvement efforts, and thus, achieve the goals.

PROGRESS TOWARD EXPECTED RESULTS

In the 1991 Annual Joint Report, twenty-six objectives were identified from the planning documents of the State Board of Education and the Tennessee Higher Education Commission as being critical to the future of all Tennesseans. In some areas, we have made significant progress toward expected results, while in others, we have not done as well. Overall, the facts confirm that education has performed in a manner which should instill pride in all Tennesseans.

1. A 25% increase in those who received GED credentials each year.

According to the results of a recent national survey conducted by The Gallup Organization, Americans place a significantly greater emphasis on higher education as a major factor in getting a job or advancing in a career than they did five years ago. Tennesseans are getting the message that completing high school and continuing their education leads to better job opportunities and higher salaries and lessens the chance of becoming unemployed. Occupations with a large proportion of high school graduates and those with less than a high school education, such as laborers, are expected to grow by only one percent between now and the year 2000. In contrast, the number of jobs requiring a college education is expected to increase by 24% over the same period.

In 1990, 16,360 Tennessee adults took the General Educational Development (GED) test and 9,953 or 62% made a passing score and received GED credentials. This represents an increase of 9.46% in those receiving the GED over those receiving the GED in 1989.

One third of those receiving the GED in 1990 were of high school age or 19 and under. One-fifth were in the 20-24 age group. Almost one-half of Tennessee's 1990 GED candidates indicated they took the test to qualify for education or training beyond the high school level. In Fall 1991, about 1,400 students with GED credentials enrolled at the public higher education institutions.

The GED test was revised in 1988 to reflect higher national norms and higher overall standards. The revised tests include an essay portion to test writing ability, a math section on algebra and geometry, and sections in social studies, science, and literature which were upgraded to place emphasis on higher level thinking skills.

Secondary education and higher education continue to work together across the state to ensure that those who do not have a high school diploma receive information about the GED program. Tennessee has 36 GED Testing Centers located throughout the state at high schools, vocational schools, community colleges, and universities.

2. A 15% increase in the number of high school graduates who go on to postsecondary education each year.

Over the past three years, undergraduate enrollment in public higher education in Tennessee has increased by approximately 30,000 students, more than the number of students enrolled at The University of Tennessee, Knoxville campus. This upward trend began five years ago and continued through Fall 1991.

These enrollment increases are good news for Tennessee. The increasing need for postsecondary education level knowledge and skills in the workplace and the rapid response of higher education to those needs have fueled this growth. Most manpower analysts predict serious shortages in the workforce

throughout the South over the next two decades. The states that are able to beat the odds in the preparation of skilled workers will be the states that profit economically from business and industrial growth. Tennessee is well on the way to becoming a state with a workforce prepared for the 21st century.

The Higher Education Commission has a long-range goal for the year 2000, to have at least 50% of recent high school graduates enrolling in public higher education institutions. Enrollment in public 4-year universities has grown around 4.5% over the last two years, but the largest increase is at the two-year institutions where enrollments have increased by almost 24%. Almost half of all college students who begin their college education in Tennessee begin at a two-year institution.

In Tennessee, there were 44,610 high school graduates in 1989; First-time freshman students in public colleges and universities for Fall 1989 were 20,573 or 46.1% of those who from graduated high school in the spring 1989.

In 1990, 44,872 students graduated from high school and 20,084 or 44.8% first-time freshmen enrolled in a public higher education institution for Fall 1990.

The data used to determine how many high school graduates go to college are estimates based on indirect statistical methods since we do not yet have an exact means of tracing every high school graduate, particularly those who go out of state or who attend private higher education institutions.

3. A 10% increase in the graduation rate each year of full-time degree-seeking college students.

Another long-range goal of the Higher Education Commission for the year 2000 is for public universities in Tennessee to graduate at least 51% of students within six years of enrollment.

Persistence to graduation is defined in Tennessee public universities by identifying those members of a freshman class who are enrolled full time in degree credit courses and then by tracking those students over the next six years to identify those who complete a degree. Persistence statistics for both universities and two-year institutions are under study in many states and by several national organizations. The definitions for "Persistence to Graduation" have remained constant over the past several decades while attendance patterns and the general demographics of student enrollments have changed. Many students today either "drop out" or "stop out" of college for a year or more for economic reasons while they are seeking an education. Increasing numbers of students are attending college on a part-time basis while continuing to work full time, thus extending the number of years required to graduate.

Persistence to Graduation

40.71% of first-time freshmen in 1984 graduated by 1990
41.86% of first time freshmen in 1985 graduated by 1991

The graduation rate at Tennessee's universities has increased over 3% during the past six years. The increase over last year's report is over 1%. These increases keep the state near national averages and on target with the goal set for the year 2000.

4. An improved participation rate in postsecondary education from all geographic areas of the state equal to the current state mean participation rate.

Improving the participation rates in higher education for those geographic areas which are historically underserved is vital if Tennessee is to be a leader in attracting jobs and serving its workforce needs. Of the eligible college population in Tennessee, i.e., all those who have graduated from high school but have

less than four years of college, 9.4% were actually enrolled in Fall 1989 in a public higher education institution. There was significant disparity among different geographic areas of Tennessee. In order to improve equity in participation, it is appropriate that the state support during the immediate future the goal that all areas of Tennessee would achieve participation rates that are at least equal to the current state mean for participation in Fall 1989.

Higher education officials have made a concerted effort to raise the awareness of the citizens of Tennessee regarding educational opportunities and access to higher education. The increased enrollment over the past three years can be attributed in large measure to older adults returning to college, greater participation by women, an increase in part-time students, more citizens seeking job training, as well as more traditional college-age students. To improve opportunities for participation in postsecondary education, classes are offered at off-campus locations in many rural and underserved areas of the state.

Tennessee's public higher education institutions' off-campus enrollment increased in 1990 almost 8% over Fall 1989. Ten percent of the full-time equivalent enrollment for Fall 1990 was at 352 off-campus locations. Approximately 23% of the total enrollment at two-year colleges is off-campus.

These off-campus sites increase the availability of educational opportunities in areas without direct service and also meet specialized community education and training needs. By using available public facilities and soliciting local funding and support, many institutions are successfully accomplishing the goal of increased participation of Tennessee's citizens in postsecondary education.

5. An increase in the participation rate of Black citizens in Tennessee higher education.

For the state to progress economically, we must provide opportunities that will ensure all Tennesseans, regardless of race, have access to higher education. Since 1983, a great deal of progress has been made in meeting the desegregation goals established pursuant to the Stipulation of Settlement agreement, Black undergraduate enrollment has grown from 16,806 in 1983 to 25,200 for the fall of 1991.

The increased participation rate can be attributed to increased emphasis in recruiting and retaining Black students, increasing the level of need-based scholarships for talented Black students, and special programs in place on each campus which provide mentors and role models for Black students.

Black Enrollment in Higher Education

Fall 1990 - Black Students 21,881 - 14.12% of total students
Fall 1991 - Black Students 25,200 - 15.25% of total students

Black graduate and professional school enrollment has increased by 12.52% (from 1,414 to 1,591) over the past three years.

6. An increase in the number of high school students completing Algebra I and II.

A goal of the State Board of Education is to strengthen mathematics education at all grade levels by revising the curriculum to emphasize problem solving and by increasing the number of high school students who take algebra and advanced mathematics courses. The following chart shows the increase in students enrolled in mathematics courses, with particularly significant increases in Algebra II and advanced mathematics.

High School Enrollment in Mathematics Courses				
Course	1985-86	1989-90	1990-91	Increase
Algebra I	49,300	48,800	49,050	- .5%
Algebra II	24,300	29,850	31,250	28.6%
Geometry	28,750	31,800	32,000	11.3%
Advanced Mathematics	11,400	13,850	14,950	31.1%

The federally funded Dwight D. Eisenhower Mathematics and Science Program provides grants to public and private schools and higher education institutions to improve the math and science knowledge and instructional practices of K-12 teachers. In addition to the $2.7 million distributed directly to local school systems by the State Department of Education in 1991-92, thirty-two projects totaling $951,521 were approved by the Commission for funding of training programs sponsored by higher education institutions, both public and private. Federal funds available for these higher education projects increased by 61% from 1990-91. A significant increase in students taking, and successfully completing, advanced math courses should follow as a result of the higher education and school system collaborations across the state in this important professional development program.

7. An increase in the high school graduation rate to 90% of those students who enter the ninth grade.

Tennessee has estimated the percent of students who drop out of school by comparing the enrollment of a particular ninth grade class with enrollment of the same class four years later. This method produces only an estimate because it does not account for students who transfer to other schools or who die.

Tennessee has implemented an improved method for counting and tracking actual students who drop out of school. The procedures are consistent with a method developed by the National Center for Education Statistics. Data for 1989-90 and 1990-91 will be available in 1992 and will give a clearer picture of the actual dropout rate.

The percent of ninth graders who stay in high school, as measured by enrollment change, has changed very little since 1985-86. **The estimated four-year dropout rate for grades 9 through 12 was 24.8% for 1990-91 compared to 26.1% in 1989-90 and 25.2% in 1985-86.**

In 1990-91, 7.9% of the seniors did not complete requirements for a diploma by the end of their senior year. However, an estimated 2,200 of the non-graduates will receive a diploma at the end of summer school or during the next 12-month period. Others may receive a GED at some later time.

8. A decrease in the number of recent high school graduates who need remedial course work in postsecondary education programs.

Findings in reports by the Southern Regional Education Board show that the trend for most colleges and universities in recent years has been an increase in remedial enrollment, and this is true in Tennessee as well. The percent of first-time freshmen, twenty and under, enrolled at public universities, community colleges, and technical institutes requiring remedial/development courses in reading, writing, or mathematics for the past two years are as follows:

Freshmen Requiring Remedial/Developmental Courses

47.1% of First-time Freshmen in Fall 1990
50.8% of First-time Freshmen in Fall 1991

The largest number of students who need additional help are at the community colleges and technical institutes. Reasons identified for the increase are an overall increase in enrollment as well as a shift of enrollment to open admission two-year colleges away from the four-year universities that have strengthened admission requirements over the past five years. Most of these students in the remedial/development program require additional work in mathematics in order to be successful in college-level algebra courses, with the lowest number of remedial students requiring additional work in writing.

A recent study by the Tennessee Board of Regents shows that 83% of the students completing a remedial program passed subsequent college level courses; nearly as many as those students (86.7%) who were not required to take a remedial course. Results also show that four years after enrolling as freshmen in 1986, 34% of the remedial class had graduated or were still in school compared to 24% of students who enrolled as freshmen in 1990 without the benefit of remedial course work. The remedial/developmental program is helping students to succeed who otherwise would be at risk of failing.

9. An increase in the enrollment in graduate and professional programs in accordance with state and national needs.

In order to improve Tennessee's competitiveness in economic development efforts, the public universities must meet the human resource needs of business, industry, government, education, and research by producing highly qualified professional graduates. The pass rate for students taking licensure examinations, such as medicine, nursing, the health technologies, teacher education, and engineering, has improved markedly and in most areas the pass rates are higher than or competitive with the national pass rates. Tennessee's higher education institutions are producing young men and women who are well prepared to enter the workforce in their chosen field or to begin further study and research in their field of study.

Total graduate and professional school enrollment has increased by 3.33% during the past year to 20,105 students. In 1991, women graduate students made up 53.38% of graduate enrollment. As noted earlier in this report, Black student enrollment has increased in both graduate and professional school by 12.52% over the past three years.

Graduate and Professional School Enrollment by Field of Study

Field of Study	1990	1991	Increase
Allied Health and Medical	2,198	2,362	7.46%
Business	2,036	2,178	6.97%
Computer Science and Engineering	1,755	1,782	1.54%
Education	4,191	4,207	.38%
Law	901	879	- 2.44%
Mathematics and Science	1,231	1,267	2.92%
Other	7,145	7,430	3.99%
Total	19,457	20,105	3.33%

10. A statewide technology network in place to serve the teaching, learning, and management needs of schools, institutions, and state agencies.

A feasibility study for a statewide technology network has been conducted to determine the management needs of public schools and institutions. To address teaching and learning needs, a study has also been conducted to determine the technology required for the twenty-first century classroom.

Staff from the State Department of Education, the State Board of Education, and the Tennessee Higher Education Commission have been appointed to serve on a statewide Distance Learning Committee. The Committee will establish a statewide plan and make recommendations to ensure the coordinated implementation of distance learning in Tennessee. This technology holds much promise for the delivery of many important services to the state in such areas as education and economic and community development at a reduced cost to taxpayers.

11. An increase in the use of state-of-the-art technology and effective instructional strategies in every public school and college classroom and supported by a comprehensive professional development system for faculty and administrators.

Funding for the first phase of the twenty-first century classroom technology initiative has been included in the Basic Education Program formula as part of the Education Improvement Act of 1992. Pilot programs on the use of effective instructional practices have been initiated in several local school systems. A comprehensive professional development system in both K-12 and higher education is needed to support and expand the efforts to increase the use of technology and effective instructional practices.

12. A decrease in the grade-level retention rates of elementary students.

It is important for schools to deliver instruction in ways that assure that all students learn. Students who have been retained (who have repeated a grade) are far less likely to graduate from high school than those who have not been retained.

In the last five years, there has been a steady reduction in grade-level retention of elementary students. This trend is very encouraging.

Percent Retained at Grade Level			
	1985-86	1989-90	1990-91
First Grade Students	12.3%	8.7%	7.7%
All Students, Grades K-8	6.0%	4.7%	4.4%

13. An increase to 100% of the four-year old at-risk children and their families enrolled in comprehensive early childhood education and parent involvement programs.

Comprehensive early childhood education and parent involvement programs have been shown to result in improved student academic achievement, increased graduation rates, and decreased special education placements. Head Start and other local preschool programs have incorporated the important aspects of comprehensive programs.
Across the nation,

Head Start programs serve an estimated 30% of eligible children ages 3-5. The percent served is somewhat higher for four-year olds. Head Start programs in Tennessee serve an estimated 7,400 four-year olds, approximately 40% of the eligible children at that age. Of the state's 95 counties, 94 have Head Start programs.

Fourteen school systems have provided preschool programs for at-risk children through the sponsorship of Head Start, Federal Chapter 1 funded preschool, or locally funded programs. Preschool children with disabilities are also served in specially designed programs, funded partially by federal funds. The state has awarded grants to thirty-eight school systems in Tennessee to teach parenting skills to families of at-risk preschool children. In November 1991, the State Board of Education adopted a policy on early childhood education and parent involvement for Tennessee.

14. An increase in the achievement levels of students on the Tennessee Comprehensive Assessment Program (TCAP) in grades 2-8 and 10 and on the proficiency test.

The Tennessee Comprehensive Assessment Program (TCAP), first implemented in 1989-90, encompasses three types of tests, each designed to meet a different need. The tests allow educators to track the progress of individual students from year to year. Student performance results from the second year, 1990-91, of the TCAP are very similar to results in the first year, 1989-90.

On the nationally normed portion of the test in grades 2-8 and 10, Tennessee students' scores are above the median national percentiles at every grade level and in each subject. Percentiles are all above the national norm which is 50. The median Tennessee percentiles range from 51 to 68 on tests of reading, language, math, science, and social studies.

Mastery of the Tennessee curriculum in mathematics and language, as measured by the criterion referenced portion of the test, is especially high in the second and third grades and varies somewhat in grades 4 through 8.

Proficiency test scores show dramatic improvement. The percent of students passing both mathematics and language arts parts of the test in the 9th grade increased from 78% in 1989-90 to 83% in 1990-91. This compares to 70% in 1984.

15. An increase in the percentage of high school graduates who complete the ACT core curriculum.

ACT provides information about the graduating class according to type of high school program completed. The results of the 1991 ACT Assessment show a greater number of Tennessee's high school graduates taking the solid academic courses needed for success in college and in the workplace. The percentage of students who reported taking a core high school curriculum, defined by ACT as a college preparatory program including 4 or more years of English and 3 or more years each of mathematics, social studies, and natural science, has increased steadily over the last four years.

In 1991, 39% of ACT tested high school graduates completed the core curriculum. This percentage has steadily increased since 1988 when only 29% completed the core and 1990 when 36% took the core. Students who completed the core curriculum performed better than those who did not. The composite score on the ACT of students taking the core curriculum in 1990 was 21.8 and in 1991 was 21.1. Students taking less than the core curriculum had a composite score of 19.1 in 1990 and 19.0 in 1991.

The number of Tennessee's Black students taking the ACT increased in 1991. Those taking the core curriculum or more had a composite score of 18.4, while those taking less than a core curriculum had a composite score of 16.2.

16. An increase in the average ACT score of high school graduates.

The 1991 ACT results include scores obtained on the new Enhanced ACT assessment introduced in 1990. The Enhanced ACT is comprised of four tests: English, mathematics, reading, and science reasoning. A total of 30,210 high school graduates from 1991 took the ACT. This represents approximately 64% of Tennessee high school graduates. Across the nation, 32% of high school graduates took the ACT.

The 1991 ACT results show that Tennessee high school graduates scored above the average for Southeastern states on 3 of the 4 subject area tests. However, Tennessee scores were below the national average in all areas. The average composite score for Tennessee students, 20.1, is below the national average of 20.6

1990 and 1991 Average ACT Scores

	Tennessee		Southeast		Nation	
Content Areas	1990	1991	1990	1991	1990	1991
English	20.5	20.2	20.2	19.9	20.5	20.3
Mathematics	19.1	19.1	19.2	19.2	19.9	20.0
Reading	N/A	20.8	N/A	20.5	N/A	21.2
Science Reasoning	N/A	19.9	N/A	19.8	N/A	20.7
Composite	20.1	20.1	20.0	20.0	20.6	20.6

The overall average ACT composite score for students entering Tennessee public higher education institutions as first-time freshmen for fall 1990 was 19.94; the average for fall 1991 was 19.71.

1990 and 1991 Entering ACT Scores in Public Colleges

	1990	1991
Two-Year Institutions	18.02	17.80
Universities	21.28	21.26

Although there was little change from 1990 to 1991, Tennessee has made considerable progress on the ACT as compared to the rest of the nation over the last five years. For example, in 1985, the difference between the average ACT composite score for the nation and the average score for Tennessee was 1.0. By 1991, that gap had been narrowed to .5. Similarly, on the ACT math score, the gap has been narrowed from 1.6 to .9. The improvement may be attributed in part to students taking more college preparatory coursework in order to meet the strengthened admissions requirements of Tennessee's public universities and colleges.

17. An increase in the number of high school students each year who complete advanced placement examinations and score 3 or above.

The College Board's Advanced Placement (AP) Program is a cooperative educational endeavor based on the premise that college-level material can be taught successfully to well-prepared secondary school students. Participating colleges grant credit and/or appropriate placement to students who have done well on the AP Examinations.

Advanced placement programs in high schools offer students the opportunity to enroll in rigorous courses and to earn college credits if they successfully complete the AP examination in a particular area of study. Forty percent (181) of Tennessee high schools now offer advanced placement courses.

The number of advanced placement candidates has more than doubled since 1985 and has increased from 5,196 in 1990 to 5,578 in 1991. A student may take an exam in more than one area of study; in 1991, 8,055 exams were taken. The number of Tennessee examinations on which students received scores of from 3 to 5 (scores which most colleges accept for college credit) was 5,107, accounting for 63.4% of the exams taken, compared to 64.1% for the nation.

18. An increase in the number of individuals each year who become licensed teachers in Tennessee.

The number of individuals completing teacher education programs at public and private institutions of higher education in Tennessee has increased by 28.2% since 1987-88. **The number of persons completing programs leading to initial licensure as a teacher in Tennessee at the baccalaureate and post-baccalaureate levels increased to 2,466 in 1989-90 and 2,429 in 1990-91.**

In 1990-91 the data base was refined to exclude persons completing licensure requirements who indicated that they did not intend to seek licensure in Tennessee but intended to seek licensure in another state. If they had been included as in prior years, the number seeking licensure would have been 2,478 for a slight one-year increase.

Individuals may be licensed for the first time in Tennessee under three different licenses: the probationary license, the out-of-state license, and the interim probationary license. **The number of individuals issued such licenses has increased by almost 20% since 1986-87. In the two years from 1988-89 to 1989-90, the number increased from 4,981 to 5,523.**

Tennessee hires an average of 3,000 new teachers each year; slightly more than half of these new hires are teachers with prior teaching experience who are re-entering the teaching workforce. About half of the newly licensed teachers enter the teaching workforce within the first two years of receiving their license.

19. An increase in the test performance and evaluation results of teacher candidates and beginning teachers.

Students seeking admission into approved teacher education programs in Tennessee colleges and universities must attain qualifying scores on the Pre-Professional Skills Test (PPST) published by the Educational Testing Service (ETS). Candidates for initial licensure are required to make a minimum score on the core battery of the National Teacher Examination (NTE), also an ETS test. A schedule has been established that increases the minimum passing score on the NTE core battery in four stages. The following table shows the percent of students reporting their scores to their institution or to the state and achieving passing scores on the NTE core battery.

NTE Examination Results	
Year	Percent Passing
1985-86	95%
1986-87	96%
1987-88	95%
1988-89	95%
1989-90	96%
1990-91	95%

In addition, teacher candidates are required to attain passing scores on specialty area tests in 26 endorsement areas. Tests have been validated and approved for use in twelve additional areas of endorsement.

20. An increase in the percentage of minorities entering the teaching profession.

Emphasis has been placed on diversity and minority participation in teacher preparation programs in Tennessee. To make it possible for minorities to go to college, several scholarships have been established. The Community College Education Recruitment Scholarship for Minorities is for entering minority freshmen who plan to enroll in a teacher education program at a Tennessee community college. The scholarship is $2,000 per academic year. The Minority Teaching Fellows Program is for minorities who qualify, who plan to enroll in a four-year institution, and agree to teach at a K-12 school in Tennessee. This is a $5,000 scholarship per academic year with a maximum of $20,000.

The number of Black candidates completing programs for initial licensure as a teacher at the baccalaureate and post-baccalaureate levels at public and private institutions of higher education in Tennessee in 1990-91 was 96, accounting for 4.06% of the total candidates. Comparable data for prior years is not available.

The percent of individuals licensed as teachers for the first time in Tennessee who are Black, including teachers from out-of-state, was 5.2% in 1986-87, 5.3% in 1987-88, 7.8% in 1988-89, and 7.0% in 1989-90. Overall, the trendline is rising.

The percent of newly hired teachers in Tennessee who are Black is similar: 6.9% in 1986-87, 6.4% in 1987-88, 8.0% in 1988-89, and 7.5% in 1989-90. However, these percentages are lower than the 11.2% of Black teachers in the teaching force in 1991-92, and much lower than the estimated 22% of public school students who are Black.

21. An increase in the number of adults served in adult literacy programs and who progress from one level of literacy to another.

The Adult Basic Education Program (ABE) serves almost 55,000 adults each year at all ABE levels, from the beginning literacy programs through GED preparation. The goal in Tennessee is to serve 100,000 adults per year in the three levels and to reach a GED completion rate of 50,000 per year.

In 1991, 15,000 adults completed basic literacy programs providing learning skills up to the 6th grade level; and 13,000 adults completed basic education level two providing skills up to the 9th grade level. An estimated 19,000 adults completed the GED in 1991, almost twice as many as those earning the GED the previous year.

The state's area vocational technical schools and community colleges cooperate with public school personnel in each community to offer assistance in comprehensive adult education and adult literacy programs. This is especially evident in regions of the state with a high illiteracy rate.

22. An increase in the number of school/business and private sector/university or college partnerships.

Approximately 80% of Tennessee's public school systems are involved in some form of organized school-business or school-community partnership program. Community involvement and partnerships are required as part of the Governor's A+ Award program which recognizes communities and local school systems. Since 1989, sixty-two communities have received the A+ Award recognition.

Tennessee's area vocational schools, colleges, and universities are among the most important financial investments of any other institutions in the communities where they are located. **Financial impact studies confirm that the economic impact of the higher education institutions on the cities and counties where they are located is three to four times the taxpayer's investment in those areas.** This is in addition to the many cultural and social benefits a community enjoys from the varied activities of institutions of higher education.

More and more communities are turning to colleges and universities to supply needed skills and resources to attract business and industry to Tennessee. One of the highest priorities for businesses and industries seeking a site in which to locate or relocate is the presence of a local college or university. Each part of the state has some highly visible higher education programs of exceptionally high quality that have a significant impact on the local economy. For example, the Centers of Excellence and Centers of Emphasis provide technical assistance, area workshops, and consulting services to industries and businesses where they are located, and thereby bring more people into the community, which in turn means more business and an improved local economy.

Partnerships have been established to provide health care to residents of rural and inner city areas and others have been established to raise the educational attainment and job skills level of citizens throughout the state. The overall growth and development of Tennessee is contingent on providing education, training, technology transfer and technical assistance, and research and service necessary for business and industry to prosper.

23. An increase in school-based decision making in public schools.

For schools to be effective, those closest to the situation must be involved in making decisions. The most meaningful education reform will occur at the school level. A number of local school systems have initiated pilot programs in school-based decision making. The results of these pilot programs will continue to be evaluated as to their effectiveness. The proposed educational reform legislation currently before the Tennessee General Assembly will further expand the opportunity for local school systems to implement school-based decision making.

In July 1991, the Board made a major revision in the state rules, regulations, and minimum standards for public schools. These revisions reduced the number of state requirements and provided additional flexibility to local school systems in determining the means by which they would achieve the desired results

of the master plan goals and other state and local policies. One of the major objectives of the master plan for public schools during the next ten years is to expand school-based decision making in Tennessee so that it is the rule rather than the exception.

In November 1991, the Board adopted a major policy concerning the role of the principal in Tennessee schools. The policy requires preparation programs and professional development activities for principals to give additional emphasis to the knowledge and skills required by school leaders in facilitating school-based decision making.

24. Adequate and sustained funding levels for pre K-12 and higher education.

Beginning in 1986, the State Board of Education began work with various education constituency groups and the State Department of Education in developing the Basic Education Program (BEP) funding formula. The Board of Education adopted the final BEP formula in November 1990 and revisions to the formula in November 1991 as part of the Board's annual reports on funding needs for Tennessee public schools. **The difference in 1992 between the level of funding currently provided by the state to public schools and the adequate funding which the BEP would provide is an additional $564 million. However, in 1991-92, due to lower state revenues, the state funding to public schools was reduced by $113 million from the 1990-91 funding level.**

On August 6, 1991, the Chancery Court of Davidson County found that "... the present system of financing public schools does not meet the equal protection requirements of the Tennessee Constitution." This decision was the result of a court case initiated in 1988 by seventy-seven small school systems in Tennessee. The Board's judgement is that the BEP funding formula, if enacted by the June 30, 1992, deadline set by the Court, will satisfy court requirements regarding school finance reform.

Beginning in 1986 and extending through 1988-89, higher education experienced record-setting years as a result of having the academic formula fully funded. Full formula funding was recommended by the Governor for the three subsequent years; however, Tennessee experienced a severe economic recession with state revenues falling well below projections and higher education budgets were drastically cut. Higher education was cut $22 million at mid-year in 1989-90 and $60 million in mid-year 1990-91. **In 1991-92 funding was cut $27.5 million from the previous year and $163.4 million from the Governor's recommended budget which was premised on a tax increase. The current budget is less than the budget three years ago, but with 30,000 more students enrolled.**

Higher education planning continues with two distinct priorities: (1) to fully fund the formula so that we can serve the sharp increases in student enrollment and (2) to build on the high academic quality that is in place. The challenge to higher education is to avoid loss of momentum at a time when resources have been constricted. There is a pride when a job is done well, and Tennessee higher education is doing its job well.

25. An increase in university research, including applied research which contributes to economic growth.

The quality and the quantity of research generated at Tennessee's senior universities continues to increase, and in many areas, the state is recognized for superior research activities. The following table indicates restricted expenditures (non state appropriated) on research from 1988 through 1991.

Research Expenditures in Universities				
	1988-89	1989-90	1990-91	Change 1988-1991
Actual Expenditures	$81,181,000	$87,066,000	$93,612,000	15.31%
Adjusted for Inflation	81,181,000	84,193,000	87,434,000	7.7%

26. An increase in private gifts and grants to colleges and universities.

In recent years, higher education institutions in Tennessee have placed a greater emphasis on private fund-raising, establishing endowment funds and strengthening institution-related foundations. This focus has come about partly because strengthening these areas provides institutions with greater flexibility to pursue priorities that otherwise could not be funded. It has also come about due to the establishment of excellence initiatives such as the Chairs of Excellence and Centers of Excellence programs. These programs draw community attention to the institutions and help to highlight what they do best. Excellence is a great motivator for creating financial support. Whatever the reasons, Tennessee's institutions have made an impressive effort in establishing a program of voluntary support which will be of even greater importance to the financial and programmatic goals of higher education through the 1990s. To the extent that the state can provide fund-raising incentives through Chairs and Centers of Excellence, or similar programs, higher education will be even more successful in garnering external support.

The following chart indicates the amount of private gifts, grants, and contracts to two-year and four-year public institutions.

Private Gifts, Grants, and Contracts			
	1989-90	1990-91	Change 1989-1991
Actual Receipts	$62,897,953	$69,047,976	9.8%
Adjusted for Inflation	62,897,953	64,490,809	2.5%

THE FUTURE

State governing and coordinating boards have the responsibility to anticipate and plan for the future. The State Board of Education and the Tennessee Higher Education Commission view this responsibility in 1992 as an opportunity to reiterate the proposed reforms in the public education system which have been developed and supported by educators, citizens, and elected officials across the state. From among the 26 goals of the two master plans on which progress has been reported, the Board and the Commission view the following five goals, plus support of the action plans for the America 2000 and Tennessee 2000 programs, as central to sustained progress. State and local policy makers should give these particular attention during 1992:

- Adequate and sustained funding levels for preK-12 and higher education to serve Tennessee's student population
- A statewide technology network to serve the teaching, learning, and management needs of schools, institutions, and state agencies
- An increase in the use of state-of-the-art technology and effective instructional practices in every public school and college classroom, supported by a comprehensive professional development system for faculty and administrators
- An increase to 100% of the four-year old at-risk children and their families enrolled in comprehensive early childhood education and parent involvement programs
- An increase in university research, including applied research which contributes to the state's economic growth

Adequate and Sustained Funding Levels

While the means to provide continuing, adequate funding for public education are yet to be determined by the General Assembly and the Governor, the Board and the Commission have developed and adopted comprehensive funding formulas based upon annually assessed needs and documented costs. The formulas, when fully funded, will provide adequate financial support for schools and higher education institutions to provide continuous, high quality, educational experiences for students. The approval of the Basic Education Program funding formula for public schools as part of the Education Improvement Act of 1992 and the full funding of both preK-12 and higher education formulas and initiatives are fundamental to accomplishing all the goals of the Master Plans.

To have adequate and sustained funding levels for preK-12 and higher education, we must first, assume the integrity of the needs assessment and cost analysis upon which the appropriations programs are based; second, sustain fiscal policies that are uncompromising in fairness and in integrity; and third, establish rigorous accountability procedures to assure efficiency and productivity; and fourth, establish among Tennesseans a clear understanding of the relationship between quality education programs, an educated population, and a prosperous economic environment. Finally, we must recommit in 1992 to find the tax resources necessary for supporting the educational plans.

Statewide Technology Network

A statewide technology network is essential to progress in the state's public education system. Students, teachers, and administrators deserve modern resources with which to facilitate learning and the daily operation of schools and institutions. Tennessee can ill afford to perpetuate a classroom learning environment designed for the 19th century when its citizens must work and compete in a global marketplace dominated by technological innovation and the power of instantaneous movement of information. Completion of planning and the initiation of pilot programs in schools and institutions during 1992 is essential to establishing a statewide technology network in a timely manner.

State of the Art Technology and Effective Instructional Practices

An increase in state-of-the-art technology in the classroom must be complimented by state-of-the-art curriculum. In some cases, modern technology can provide students and teachers access to current curriculum materials and resource information. In other cases, the presentation of the curriculum content, whether by the use of modern technology or through direct student/teacher interaction, requires the use of effective instructional practices such as non-graded classrooms and continuous-progress schools, cooperative learning, whole language, hands-on mathematics and science, and peer tutoring.

The use of technology and effective instructional techniques must be supported by a comprehensive professional development system which provides faculty and administrators with the opportunity and the resources to learn new information and techniques. A policy on professional development in Tennessee's schools and the funds to initiate additional staff training and development activities for both K-12 and higher education are needed. These efforts should begin in 1992 and support the phase-in implementation of the overall education reform plan in the next few years.

Early Childhood Education and Parent Involvement

We must commit ourselves to educating all our children. Extensive research and experience during the past thirty years has demonstrated that high quality early childhood education programs for at-risk children result in greatly improved academic achievement and substantial reduction in state expenditures when the students mature. The Board has adopted a policy, developed in cooperation with the State Department of Education, for early childhood education and parent involvement in Tennessee. The policy contains a plan of action for enrolling 100% of the four-year old at-risk children and their families in comprehensive programs sponsored by federal Head Start funding or by state funding. A commitment to provide the state funding over the next several years to initiate these programs is needed in 1992.

University Research and Economic Development

The public education system and the economy of Tennessee will not improve and flourish without an effective research component. Business and industry, as well as schools and higher education institutions, can only develop and improve services and products if there is a strong commitment to conducting research and to obtaining resources which support both experimental and applied research.

The state's commitment to establishing and funding Centers of Excellence and Chairs of Excellence at each of the public four-year universities has provided a basis for efforts to secure additional external support for research. This essential focus should continue to be supported and expanded during 1992 if the overall goals of economic development and quality of life for the 21st century are to be realized.

America 2000 and Tennessee 2000 Programs

Governor Ned McWherter and U. S. Secretary of Education Lamar Alexander jointly announced in October 1991 the creation of the Tennessee 2000 program as part of the America 2000 program of President George Bush. The Tennessee 2000 program urges local communities across the state to:

1. Adopt the state's 21st Century Challenge goals and the National Education Goals,

2. Form a local organization to help achieve the goals,

3. Issue a periodic report card of progress toward meeting the goals, and

4. Help create new schools to change the way we educate students.

Several communities in Tennessee, including Memphis, Nashville, and sixteen city and county school systems in Upper East Tennessee have already accepted this challenge. These communities, along with the Board and the Commission, recognize that many things called for in these programs can be implemented within current structures and resources. The enactment of the Education Improvement Act of 1992 and the provision of adequate funding by the Tennessee General Assembly would provide the Board and Commission, as well as local school systems and institutional governing boards, with the necessary authority and resources to fully implement the strategies of the America 2000 and Tennessee 2000 programs.

APPENDIX A
REQUIREMENTS FOR THE ANNUAL JOINT REPORT
AND
SUMMARY OF COMPLIANCE

The annual joint report *Tennessee Public Education: Positioned for Progress in the 1990s* complies with the requirements established in the Public Education Governance Reform Act of 1984 (TCA 49-1-302).

The Public Education Governance Reform Act (PEGRA) of 1984 (TCA 49-1-302) directs the State Board of Education and the Tennessee Higher Education Commission jointly provide a report to the Governor and the General Assembly, all public schools, and institutions of higher learning and their respective boards. The report is to be submitted not later than February first of each year and is to include, but not be limited to:

A. The extent of duplication in elementary-secondary and postsecondary education,

The respective master plans of the State Board of Education and the Tennessee Higher Education Commission are results oriented. The measurements of learning at each level of the education system precludes unnecessary duplication.

B. The extent of compatibility in high school graduation requirements and admission requirements of postsecondary institutions,

The high school graduation requirements and the requirements for admission to public colleges and universities do not conflict. There are some requirements for graduation from high school which are not requirements for admission to higher education, e.g., physical and health education. Also, there are some requirements for higher education admission that are not required for high school graduation, e.g., two units of a foreign language and one unit of visual/performing arts.

C. The extent to which respective master plans of the State Board of Education and the Tennessee Higher Education Commission are being fulfilled, and

This report contains achievements of both elementary-secondary and higher education with respect to the master plans, and the two master plans are closely related.

D. The extent to which state needs in public education are being met as determined by such Board and Commission.

This report contains information about the state's needs for education, progress that has been made, and goals for achievement over the next decade.

APPENDIX B
TENNESSEE HIGH SCHOOL GRADUATION REQUIREMENTS

Courses	Units
English Language Arts	4
Mathematics	2
Science	2
American History	1
Economics	½
Physical Education	1
Health Education	½
Electives	9
Total	20

Note: For students graduating in the 1994-95 school year and thereafter, ½ unit in United States Government and 1½ additional units in Mathematics, Science, or Social Studies will be required. The total number of units required will remain at 20.

APPENDIX C
MINIMUM HIGH SCHOOL COURSE REQUIREMENTS FOR REGULAR UNDERGRADUATE ADMISSION TO TENNESSEE BOARD OF REGENTS INSTITUTIONS AND THE UNIVERSITY OF TENNESSEE INSTITUTIONS

SUBJECT AREA AND UNITS	HIGH SCHOOL COURSES FULFILLING REQUIREMENTS	
English 4 units required	English I, II, III, IV	
Algebra I and II 2 units required	Algebra I, Algebra II	
Advanced Mathematics 1 unit of geometry or an advanced course with geometry as a significant component required	Unified Geometry Trigonometry Advanced Math Survey Calculus	Analytical Geometry Probability & Statistics Advanced Algebra
Natural/Physical Sciences 2 units required; 1 must be a laboratory course in biology, chemistry, or physics	Biology I, II Chemistry I, II Physics Physiology Geology Ecology and Conservation of Natural Resources	Principles of Technology General Science Physical Science General Science 1-A
U. S. History 1 unit required	U. S. History	
Social Studies 1 unit required	World History Ancient History Modern History	World Geography European History
Foreign Language 2 units in same language	Latin French Spanish German	American Sign Language I Japanese Russian
Visual/Performing Arts 1 unit required (beginning Fall 1993)	Theater Arts Visual Arts Music Theory Music History	Vocal Music Instrumental Music Art History General Music

APPENDIX D
NATIONAL EDUCATION GOALS

President Bush and the National Governors' Association

GOAL 1. By the year 2000, all children in America will start school ready to learn.

GOAL 2. By the year 2000, the high school graduation rate will increase to at least 90%.

GOAL 3. By the year 2000, American students will leave grades 4, 8, and 12 having demonstrated competency in challenging subject matter, including English, mathematics, science, history, and geography; and every school in America will ensure that all students learn to use their minds well, so that they may be prepared for responsible citizenship, further learning, and productive employment in our modern economy.

GOAL 4. By the year 2000, U. S. students will be first in the world in mathematics and science achievement.

GOAL 5. By the year 2000, every adult American will be literate and will possess the skills necessary to compete in a global economy and to exercise the rights and responsibilities of citizenship.

GOAL 6. By the year 2000, every school in America will be free of drugs and violence and will offer a disciplined environment conducive to learning.

APPENDIX E
GOALS FOR EDUCATION: CHALLENGE 2000

Southern Regional Education Board

By the year 2000:

- All children will be ready for the first grade.
- Student achievement for elementary and secondary students will be at national levels or higher.
- The school dropout rate will be reduced by one-half.
- Ninety (90) percent of adults will have a high school diploma or equivalency.
- 4 of every 5 students entering college will be ready to begin college-level work.
- Significant gains will be achieved in the mathematics, sciences, and communications competencies of vocational education students.
- The percentage of adults who have attended college or earned two-year, four-year, and graduate degrees will be at the national averages or higher.
- The quality and effectiveness of all colleges and universities will be regularly assessed, with particular emphasis on the performance of undergraduate students.
- All institutions that prepare teachers will have effective teacher education programs that place primary emphasis on the knowledge and performance of graduates.
- All states and localities will have schools with improved performance and productivity demonstrated by results.
- Salaries for teachers and faculty will be competitive in the marketplace, will reach important benchmarks, and will be linked to performance measures and standards.
- States will maintain or increase the proportion of state tax dollars for schools and colleges while emphasizing funding aimed at raising quality and productivity.

APPENDIX F
STATE BOARD OF EDUCATION
MASTER PLAN FOR TENNESSEE SCHOOLS:
PREPARING FOR THE 21ST CENTURY

Mission: To Have Tennessee Schools Among the Best in the Nation

I. The 21st Century Classroom

A. Sound Instructional Program; Full Tool Box of Resources

- All children will complete the third grade having developed the capabilities to read, write, and solve mathematical problems effectively.
- All children will complete the eighth grade having demonstrated competency in challenging subject matter and having developed the ability to learn independently and use their minds well.
- Children with identified disabilities will progress in accord with their Individualized Educational Programs (IEPS).
- All students admitted to public colleges and universities will be prepared to begin college-level work.
- All students graduating with an emphasis in vocational education will be prepared to compete effectively in the job market and/or to succeed in postsecondary technical education.
- The average achievement level of Tennessee students will exceed the national average and will be in the top one-third of the states in the Southeast.
- The Tennessee school curriculum will include challenging subject matter so that all students learn to use their minds well and are prepared for responsible citizenship, further learning, and productive employment.
- Teaching will be a profession of choice for a significant portion of the best and brightest graduates of the state's colleges and universities.

B. Education of All Students; Additional Resources for Those At-Risk

- All children will begin school ready to learn
- At least 85 percent of all students will complete high school.
- At least 90 percent of the adult population will be literate.

C. Technology

- State-of-the-art technology will be used to improve instruction and learning in all schools, to provide professional development, to manage schools and school systems, and to link all schools in a statewide information network.

II. School Governance

A. Accountability

- State and local education policies will be focused on results rather than process.
- Tennessee will have a management information system that provides information on students, schools, and school systems to improve learning and assist policy making.

B. Leadership

- All leaders of schools and school systems will be prepared to demonstrate improve performance of schools and school systems.

C. School-Based Decision Making

- School-based decision making will be the rule rather than the exception in schools.

III. Adequate and Sustained Funding

- A comprehensive approach to funding schools will provide adequate and equitable distribution of resources on a continuing basis, will provide adequate funding for new initiatives, and will be tied to goals and accountability standards.

APPENDIX G
21ST CENTURY CHALLENGE:
STATE GOALS AND OBJECTIVES FOR EDUCATIONAL EXCELLENCE

Commissioner Charles Smith
State Department of Education

By no later than the first day of the 21st century:

- All entering first grade students--rich and poor black and white, urban and rural, gifted and disabled--shall be prepared to achieve at the first grade level.
- Every child who completes the third grade shall be prepared to read and write and solve mathematical problems effectively at the fourth grade level.
- Achievement levels of Tennessee students shall exceed the national average and be in the top one-third of the states in the Southeast.
- The statewide high school completion rate shall be at least 80 percent.
- Teaching shall be a profession of choice for a significant portion of the best and brightest graduates of the states' colleges and universities.
- No less than 90 percent of the Tennessee adult population shall be literate.
- All students graduating with an emphasis in vocational education shall possess the competencies required to compete effectively in the job market within their geographical area of choice and/or to succeed in postsecondary technical education.
- All local school districts shall be prepared to demonstrate conclusively improved performance and productivity.
- All students admitted to state universities shall be prepared to begin college-level work.
- A comprehensive approach to funding schools shall be in place and such an approach shall be linked directly to goals and tied to accountability standards for quality and productivity.
- School-based decision making shall be the rule rather than the exception in all school districts of the state.
- The Tennessee school curriculum shall be on the cutting edge of knowledge and fully responsive to the vocational, academic, and special education needs of all students as well as the employment needs of this state's businesses and industries.

APPENDIX II
TENNESSEE CHALLENGE 2000

Tennessee Higher Education Commission

A. By the year 2000, Tennessee will be among the leading Southern states in providing college education to its citizens.

- By the year 2000, the combined headcount undergraduate enrollment of public higher education institutions in Tennessee will be over 206,000 students.
- By the year 2000, 50% of recent high school graduates will enroll in public higher education institutions in Tennessee.
- By the year 2000, graduate and professional school enrollment in public universities will be adequate to meet the human resource needs of business, industry, government, education, and research in Tennessee.
- By the year 2000, headcount enrollment in area vocational/technical schools will reach 24,000 students per year.
- By the year 2000, enrollment of students over the age of 25 in public universities and colleges in Tennessee will increase to 50%.
- By the year 2000, public universities in Tennessee will graduate at least 51% of students within six years of enrollment.
- By the year 2000, two-year institutions in Tennessee will graduate at least 25% of students within six years of enrollment.
- By the year 2000, 75% of students completing university parallel degree programs at public community colleges in Tennessee will enroll in baccalaureate degree programs at state universities.
- By the year 2000, the racial composition of enrollments in public higher education institutions will be sufficient to ensure that all Tennesseans, regardless of race, will have access to higher education.
- By the year 2000, rates of persistence to graduation will be the same for Blacks as for other racial groups.

B. **By the year 2000, Tennessee will be a national leader in improving the quality of instructional programs and demonstrating this improvement through statewide and institutional assessment.**

- By the year 2000, the average ACT COMP scores of graduates of Tennessee's public universities will average 188.5.
- By the year 2000, passing rates on professional licensure examinations of graduates of Tennessee's public higher education professional schools will remain above national levels.
- By the year 2000, 75% of students completing university parallel degree programs at public community colleges in Tennessee will enroll in baccalaureate degree programs at state universities.
- By the year 2000, rates of transfer from public community colleges to state universities in Tennessee will be the same for blacks as for other racial groups.
- By the year 2000, a Superior Teaching Program will be fully funded and implemented across the state.
- By the year 2000, cumulative collections of materials in libraries at Tennessee public institutions will be current and these libraries will be able to provide ready access to materials necessary to support their instructional and research needs.

C. **By the year 2000, Tennessee's colleges and universities will be among the nation's leading institutions in preparing graduates with the knowledge and skills essential for effective teaching.**

- By the year 2000, 1,800 individuals will complete teacher education programs in Tennessee public universities each year. Of that number 396 (22%) will be black.
- By the year 2000, 95% of teacher education programs in Tennessee's public universities will pass the NTE or an equivalent examination on the first attempt.

D. **By the year 2000, Tennessee will have improved both the quality and quantity of research and public service so that the state is recognized for its superior research and service activities.**

- Expenditures on research from restricted accounts at universities will reach $230 million by the year 2000.
- Expenditures on public service from restricted accounts at universities will reach $43 million by the year 2000.

E. **By the year 2000, Tennessee's higher education institutions will be able to compete for the very best faculty and staff.**

- By the year 2000, faculty salaries at Tennessee public higher education institutions will be above those of their peers in other states.

F. **By the year 2000, Tennessee's higher education institutions will have garnered sufficient resources to achieve the high quality and access envisioned in the goals of *Tennessee Challenge 2000.***

- By the year 2000, Tennessee's public higher education institutions will merit a proportion of state dollars above that currently received.
- By the year 2000, annual private contributions to Tennessee public higher education will be $140,000,000.

APPENDIX I
HIGHER EDUCATION SERVING TENNESSEE

Executive Summary
Tennessee Higher Education Commission

Through strategic planning, Tennessee higher education is combining educational policy and planning with financial administration. This plan represents a blue print for Tennessee higher education as, together, we prepare for the year 2000.

As we enter the next century, out state's population will be only slightly larger but will be older. Most of the jobs available to our citizenry will require not only the best elementary and secondary education but also postsecondary training.

Recognizing the urgency that Tennessee can and should be a leader in educational and economic achievement, representatives of the two higher education governing boards and the state coordinating board met during the past year to project goals and objectives for Tennessee higher education.

Within this strategic plan, higher education proposes to serve Tennessee's student population; serve the schools of Tennessee; help Tennessee realize its economic potential; continue and expand quality initiatives; improve institutional efficiency; and use technology to serve Tennessee.

SERVING STUDENTS

In spite of abrupt increases in higher education enrollments during recent years, the educational needs of the state are far from being met. In terms of the percentage of persons age 25 or older who have completed 4 or more years of college, Tennessee with 12.6% is significantly below the national average of 16.2% and the SREB average of 14.5%.

Tennessee must become a leader in attracting jobs and serving its work force needs. It is predicted that the nation, and especially the South, will experience severe work force deficiencies during the next decade and into the next century. Tennessee can resist that trend by raising the educational and job skill levels of its work force and by ensuring that such improvement responds to the needs of both urban and rural areas.

The resources of higher education within the state--private and public colleges and universities must be brought to bear on this issue. The Fall 1990 public higher education enrollment in Tennessee was approximately 180,000 students. An increase of 70,000 students by the year 2000, thus raising enrollment to 250,000, would move the state to a competitive level in the south and nation with respect to the needs of an educated work force.

SERVING SCHOOLS

In Tennessee we must view the relationship between K-12 and higher education as a mutually dependent continuum. Success at any one level of education depends on good performance at all levels. Higher Education has a responsibility to serve and support K-12 as its partner in improving all of education.

HELPING TENNESSEE ECONOMICALLY

Tennessee's competitiveness can be improved and sustained only if it builds and maintains high quality educational programs and provides access to them for students from kindergarten through advanced graduate programs. Further, the sustained attractiveness and well being of the state will require that higher education contributes to high quality health care, implementation of new technologies, and continued cultural and social growth of the state.

IMPROVING QUALITY

To improve quality of universities and colleges, the plan recommends new Chairs of Excellence and professorships for outstanding teachers and improvements to faculty salaries.

IMPROVING EFFICIENCY

It is obvious that in order to meet the needs of the citizens of Tennessee, higher education institutions must operate in as effective and efficient a manner as possible. Great care must be taken to ensure that the maximum effect is achieved from any appropriation of new funding into the higher education system. Administrative cost savings should be reinvested into making the instructional programs more effective.

The coordinating and governing boards should ensure that strategic planning, outcomes assessment, program review, and executive accountability are effective and properly supported. Higher education should expand its emphasis on assessment of student learning and on evaluation of institutions fulfilling their missions as part of the strategic planning process. Personnel should be well compensated, appropriately supported, and all programs thoroughly evaluated.

USING TECHNOLOGY

Higher education should participate as a partner with the state in the planning and development of a state telecommunications system and should continue to upgrade the technological capabilities of all institutions to improve the delivery of services to the state.

The higher education community believes that the implementation of recommendations contained in the report, *Higher Education Serving Tennessee*, will assure that the quality of higher education will improve markedly, that Tennessee will be a leader among the other states, and that the citizens of Tennessee will be well served by their colleges and universities.

APPENDIX J
EDUCATIONAL GOALS AND PLANNING DOCUMENTS FOR TENNESSEE

The studies to determine the need for change in Tennessee's public education have resulted in the following documents:

Master Plan for Tennessee Schools: Preparing for the Twenty-First Century

State Board of Education

Goals and Objectives of the 21st Century Challenge Plan

Recommendation to the General Assembly and the State Board of Education
Commissioner Charles Smith, State Department of Education

Tennessee Education for the 21st Century

Report to Governor Ned McWherter, State of Tennessee
Dr. M. Donald Thomas, Consultant

Higher Education Serving Tennessee

A Master Plan for Higher Education in Tennessee
Tennessee Higher Education Commission

Tennessee Challenge 2000

Recommendation to the General Assembly of Specific Benchmarks for Higher Education
Tennessee Higher Education Commission

The Tennessee Board of Regents Strategic Planning Document: 1990 to 1995

Tennessee Board of Regents

The University of Tennessee Master Plan

The University of Tennessee Board of Trustees

APPENDIX K
TENNESSEE 2000 PROGRAM

Governor Ned McWherter

Urges communities across the state to:

- Adopt the state's 21st Century Challenge Goals and the National Education Goals.
- Form a local organization to help achieve the goals.
- Issue periodic report card on progress toward meeting the goals.
- Help create new schools to change the way we educate students.

APPENDIX L
AMERICA 2000 PROGRAM: AN EDUCATION STRATEGY

President George Bush
Secretary of Education Lamar Alexander

A long-range plan to move America toward the National Education Goals:

I. Better and More Accountable Schools

- World Class Standards for Knowledge and Skills Expected of Students
- American Achievement Tests tied to World Class Standards
- American Achievement Test Results used by Colleges, Universities, and Employers for Admission and Hiring
- Presidential Citations for Educational Excellence by Students on Tests
- Presidential Achievement Scholarships
- National and State Report Cards on Results
- National Assessment of Education Progress Data Collection
- New Choice Incentives and Choice Applied to Chapter 1
- School as the Site of Reform
- Merit Schools Program to Reward Schools that Move Toward Goals
- Governors Academies for School Leaders
- Governors Academies for Teachers
- Differential Pay for Teachers Based On Teaching Performance and Assignments
- Alternative Teacher and Principal Certification
- Honor and Reward Outstanding Teachers in Core Subjects

II. A New Generation of American Schools

- Research and Development by New American Schools Design Teams Supported through the New American Schools Development Corporation
- Create New American Schools which Break-the-Mold and Produce Extra- ordinary Gains In Student Learning
- American 2000 Communities Challenge by President
- Federal Start Up Costs for First 535+ New American Schools
- Business and Private Donations to Support Design Teams
- Bringing America On-Line with Electronic Networks for Access by New American Schools

III. A Nation of Students Continuing to Learn Throughout Our Lives

- Private-Sector Job-Related Skills and Standards
- Skill Clinics for Assessment and Referral
- Government-wide Skill Upgrading by Federal Agencies
- Recommitment to Literacy among Adults
- National Conference on Education for Adult Americans

IV. Communities Where Learning Can Happen -

- America 2000 Communities Designated By Governors
- Presidential Recognition of America 2000 Communities
- Maximizing Federal and State Program Flexibility and Effectiveness to Meet the Needs of Children and Communities
- Increased Attention to Parent Responsibility for Children, and Family and Community Values Essential for Strong Schools